

INFORMATION FOR CUMULATIVE EFFECTS ANALYSIS OF OIL AND GAS DEVELOPMENT IN THE FORTIFICATION CREEK AREA

BLM proposes to use the following analysis criteria and information to assess cumulative effects of oil and gas development in the Fortification Creek Special Area (FCA). This information was compiled from projected development supplied by oil and gas companies. Because of the uncertainty of long term forecasts, site-specific locations will not be known until Plans of Development (PODs) are submitted to the BLM.

In addition to standard operating procedures, the following activities are proposed.

Wells/Drilling

- Assume 7 to 10 days total for well drilling. 2-6 rigs operating simultaneously in a POD.
- The companies propose development to begin from the borders of the FCA and then move inward with initial activity in the southern portion of the area. All activity will then gradually move inward with the exception of the Deer Creek POD which is in the center of the FCA. Development in the northern portions of the area will not begin until approximately 2008.
- In order to expedite disturbance due to drilling, some operators may drill continuously around the clock.
- Most of the operators will drill single wells and perforate all coals (multiple completions).
- Average life of a well is estimated at 7 to 10 years.
- Lance Oil and Gas has indicated that large unit development would occur over the course of three years.

Travel

- The metering houses and compressors will be visited daily. Wells will be visited weekly during production.
- Remote telemetry of onsite facilities will be used whenever possible to reduce vehicle traffic to well sites. Telemetry use may be limited in some areas by terrain.

Motorized vehicle travel restrictions are limited to those that would be imposed in specially designated elk range areas.

Power

- Single pole power lines would branch off of existing main lines along the Echeta Road, Upper Powder River Road and a proposed line that would parallel the southern boundary of the area and enter the SMA.
- When the overhead electrical lines reach a drop point, they would then be buried underground to the wells.
- Temporary gas-or diesel powered electrical generation will be used until permanent electrical power is supplied to the site. Approximately, three generators per 20 wells could be used for as long as a year before permanent power is available.

Water Management

Water management has been proposed as follows:

- Approximately 50% of the water management, primarily in the southwestern area, would be EMIT water treatment with discharge into Fortification Creek. The remaining, mostly in the southeastern area, would be containment through the use of impoundments. A small percentage is being proposed for land application. It is estimated that the remainder of the northern portion of the area would have similar proportions of water management strategies.

Production

- Major pipelines will follow crowned and ditched roads where possible.
- Compression within the FCA would be mostly smaller screw type. Known locations of compressors are as follows:
 - A screw-reciprocating compressor facility located in the NE/4 section 26 T51N R76W.
 - A screw compressor station in Section 25 T51N R76W and in section 16/section 9 (on the border) T51N R76W.

Additional Company Actions

- Lance Oil and Gas has proposed to conduct Visual Resource Management (VRM) assessments in their PODs.